

Date: Wednesday, 4/4/2007 9:03:48 AM
 User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : WEARPLATE
Job Number : 31612	
Estimate Number : 10606	
P.O. Number : <i>N/A</i>	Part Number : D33193
This Issue : 4/4/2007 S.O. No. : <i>N/A</i>	Drawing Number : D3319 REV. B
Prsht Rev. : NC	Project Number : N/A
First Issue : <i>N/A</i> Type : SMALL /MED FAB	Drawing Revision : B
Previous Run : 30905	Material : <i>N/A</i>
Written By : _____	Due Date : 4/11/2007 Qty: 10 Um: Each
Checked & Approved By : <i>07.04.04</i>	
Comment : Est: A 05.05.12 New issue KJ/JLM	
Est Rev: B Now on Waterjet 06-10-03 JLM	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	M1010S18GA	1010/1025/A21/6aA SHEET .048
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Comment: Qty.: 3.4150 sf(s)/Unit Total : 34.1502 sf(s)

1010/1025/A21/6aA SHEET .048" Thick

Batch: *M104421**SAD 07/05/15*

2.0	WATER JET	FLOW WATER JET
-----	-----------	----------------



Comment: FLOW WATER JET

1-Cut as per Dwg D3319

Dwg Rev: *B*Prog Rev: *B**SAD**07/05/15*

2-Deburr if necessary

3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
-----	-----	--



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

SAD 07/05/15

4.0	QC8	SECOND CHECK
-----	-----	--------------



Comment: SECOND CHECK

07.05.15 (10)

5.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1
-----	-------------	-------------------------------



Comment: SMALL & MEDIUM FAB RESOURCE 1

Deburr if necessary

*SAD 07/05/15**10*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 4/4/2007 9:03:48 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: WEARPLATE

Job Number: 31612

Part Number: D33193

Job Number:



Seq. #:

Machine Or Operation:

Description:

6.0

BRAKE NC

NC BRAKE



Comment: NC BRAKE

Form using DT8326 & DT8261 as per Dwg D3319 Rev: B

SB 07/05/16

10

7.0

QC6

DIMENSIONAL CHECK



Comment: DIMENSIONAL CHECK

07/05/16 10

8.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

Weld hard surface using D3319-3T2 per QSI 004 and Dwg D3319 Rev: 0

Qty Part Number Description Batch

A/R N/A

7560 Hardcoat Rod

Batch
B1041368

FC 07/06/11 (10)

9.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

07/06/11 (10)

10.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat Grey Sandtex (Ref: 4.3.5.6) as per QSI 005 4.3

BL

07-06-13 (10)

11.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT

07/06/21

(PTU)

12.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify on inside surface using a permanent fine point marker with the following:

TCCA-PDA, Dart Aerospace Ltd.

P/N: D3319-3, B/N: BXXXXX

For Product Eligibility see PDA05-18

and Stock

Location: _____

07/06/22 (10)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☐ No ☒ DQA: ☒ Date: 07/06/22
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
07/06/20	2.0 10.0	Upon paint inspection, A hole was found at the aft of the wear plate, due from the water jet tip run off. Root cause: machine start/stop error	QS/042 2	grind, & fill hole with weld, grind smooth Re-powder coat grey re QS1005	M.A. 07/06/21	07/06/20 07/06/21	QS/042	07/06/20

NOTE: Date & initial all entries

Date: Wednesday, 4/4/2007 9:03:48 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: WEARPLATE

Job Number: 31612

Part Number: D33193

Job Number:



Seq. #:

Machine Or Operation:

Description :

13.0

QC21

FINAL INSPECTION/W/O RELEASE



(10)

Comment: FINAL INSPECTION/W/O RELEASE

W 07/06/22

Job Completion



W 07/06/22

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

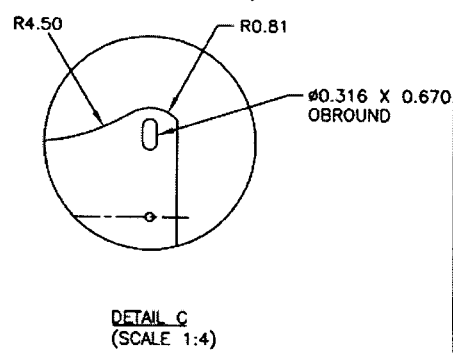
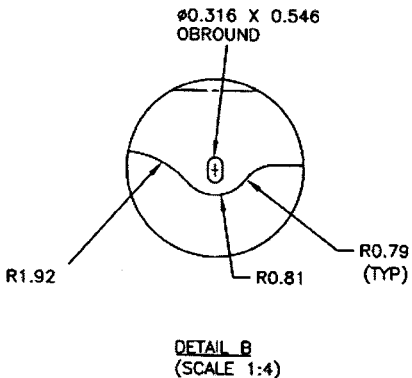
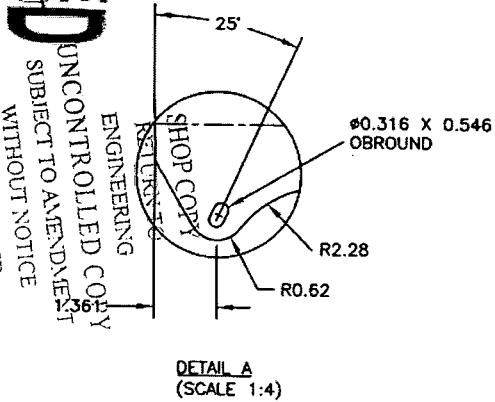
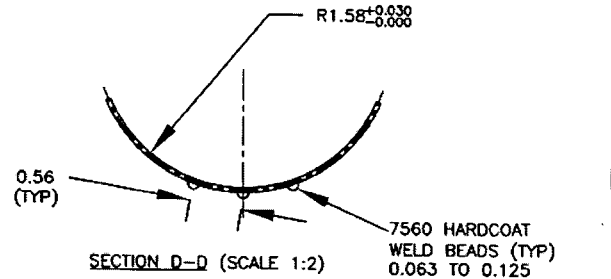
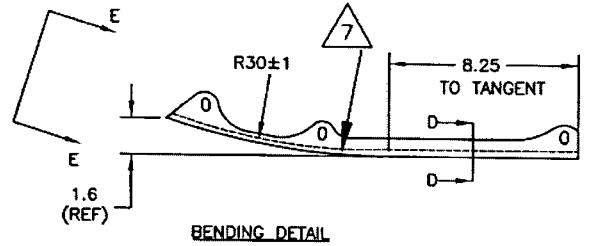
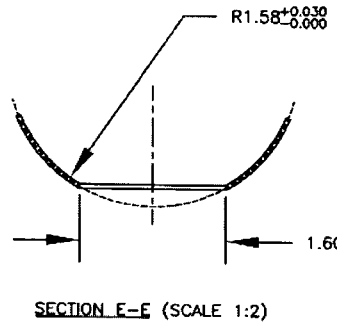
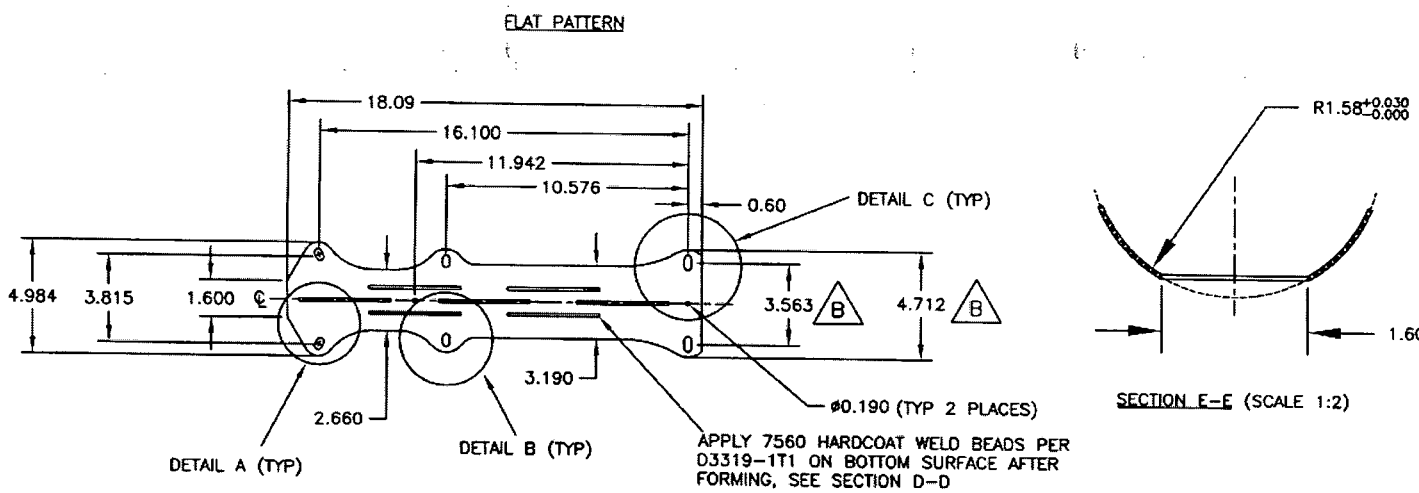
QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN	DRAWN BY	DART AEROSPACE LTD
P1	04	HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO.
		D3319
DATE	TITLE	REV. B
05.06.06	WEARPLATE	SHEET 1 OF 5
A	04.09.24	NEW ISSUE
B	05.06.06	WIDEN HOLES, REDUCE WIDTH -3/-5/-7



- D3319-1 WEARPLATE
- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 18 GAUGE (0.048 THICK)
 - 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3
 - 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) PART IS SYMMETRICAL ABOUT CENTERLINE
 - 5) ALL DIMENSIONS IN INCHES
 - 6) WELD PER DART QSI 004
 - 7) IDENTIFY ON INSIDE SURFACE AS INDICATED USING FINE POINT PERMANENT INK MARKER:
"TCCA-PDA, DART AEROSPACE LTD., P/N D3319-1 B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA05-18"

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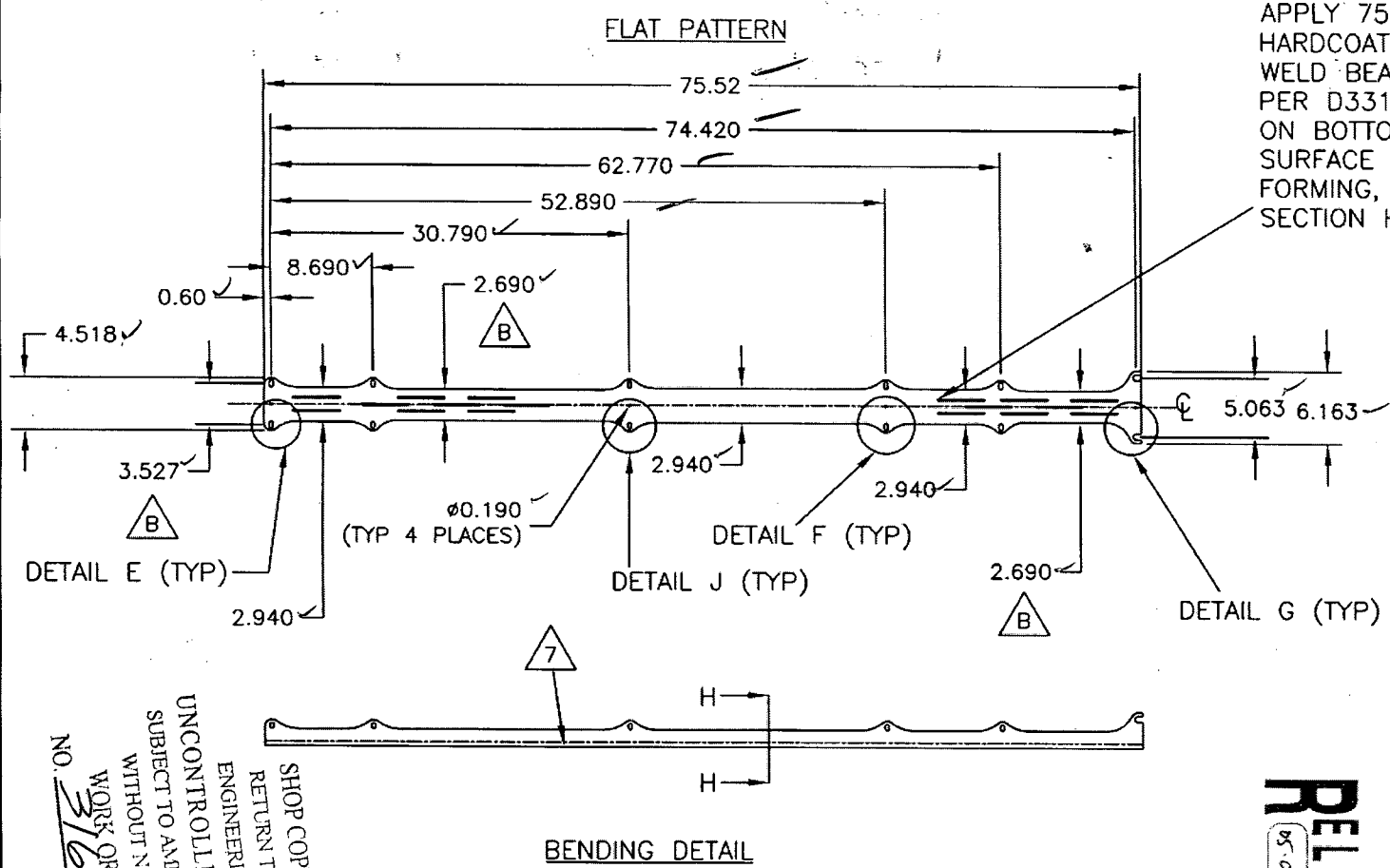
WORK ORDER
NO. 37672

DART

DESIGN	04	DRAWN BY	04	DART AEROSPACE LTD
CHECKED		APPROVED		HAWKESBURY, ONTARIO, CANADA
DATE	05.06.06	TITLE	D3319	REV. B
		WEARPLATE		SHEET 2 OF 5
				SCALE 1:15

APPLY 7560
HARDCOAT
WELD BEADS
PER D3319-3T1
ON BOTTOM
SURFACE AFTER
FORMING, SEE
SECTION H-H

RELEASED
05.07.30

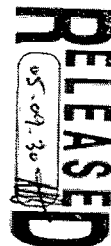


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WORK ORDER
NO. 31612

D3319-3 WEARPLATE

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 18 GAUGE (0.048 THICK)
- 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) PART IS SYMMETRICAL ABOUT CENTERLINE
- 5) ALL DIMENSIONS IN INCHES
- 6) WELD PER DART QSI 004
- 7) IDENTIFY ON INSIDE SURFACE AS INDICATED USING FINE POINT PERMANENT INK MARKER:
"TCCA-PDA, DART AEROSPACE LTD., P/N D3319-3 B/N BXXXXX,
FOR PRODUCT ELIGIBILITY SEE PDA05-18"

DESIGN	D41	DRAWN BY	SH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED	<i>[Signature]</i>	APPROVED	<i>[Signature]</i>	
DATE	05.06.06			
DRAWING NO.			D3319	
TITLE			WEARPLATE	REV. B SHEET 3 OF 5 SCALE 1:5



- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21,
38W/44W/50W/60W/70W SERIES STEEL 18 GAUGE (0.048 THICK)
- 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) PART IS SYMMETRICAL ABOUT CENTERLINE
- 5) ALL DIMENSIONS IN INCHES
- 6) WELD PER DART QSI 004
- 7) IDENTIFY ON INSIDE SURFACE AS INDICATED USING FINE POINT PERMANENT INK MARKER:
"TCCA-PDA, DART AEROSPACE LTD., P/N D3319-5 B/N BXXXXX,
FOR PRODUCT ELIGIBILITY SEE PDA05-18"

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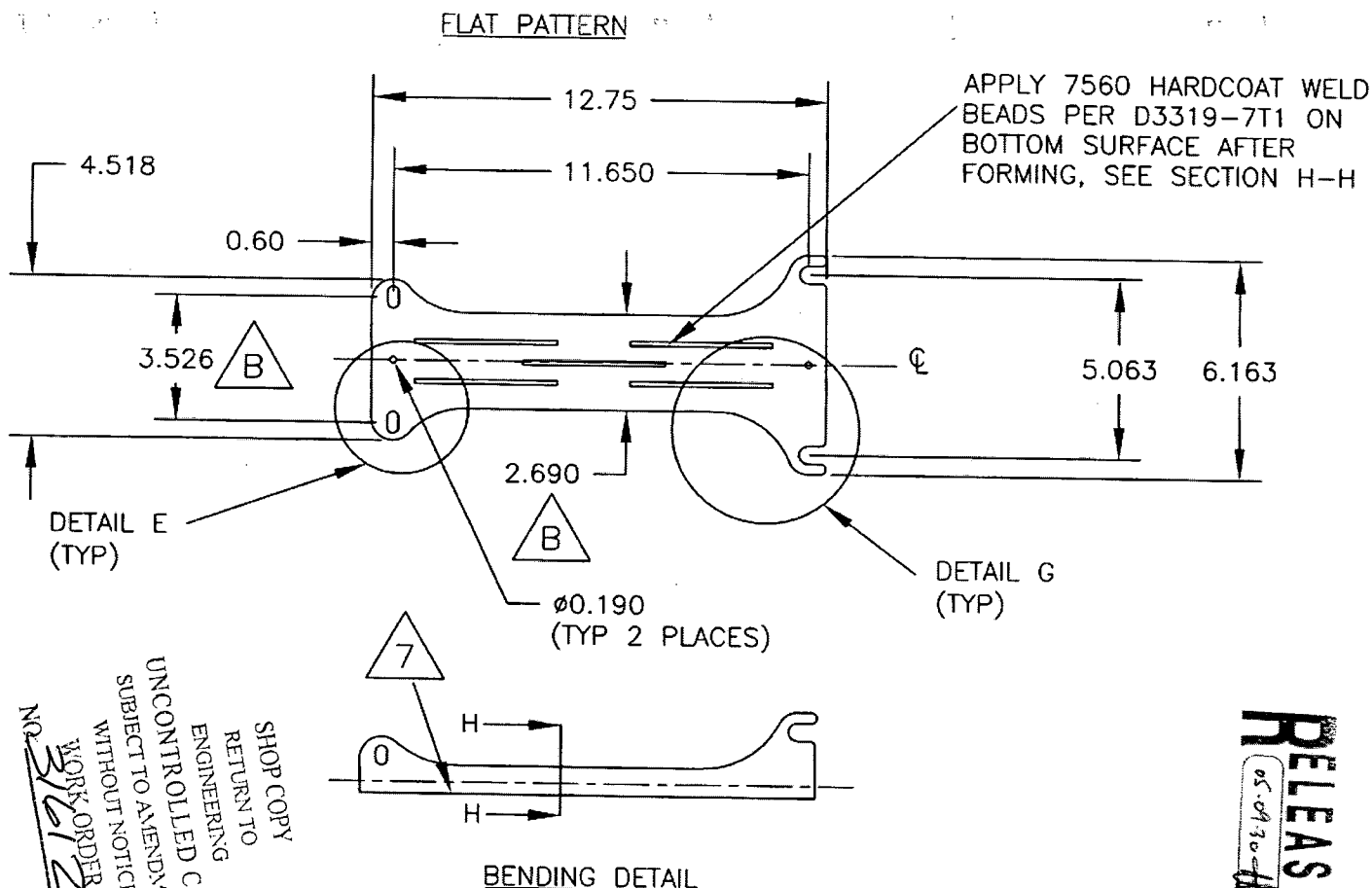
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DART

DESIGN	PH	DRAWN BY	PH	DART AEROSPACE LTD
CHECKED	PH	APPROVED	PH	HAWKESBURY, ONTARIO, CANADA
DATE	05.06.06	TITLE	WEARPLATE	REV. B
				SHEET 4 OF 5
				SCALE 1:5

RELEASED
05-09-30-11



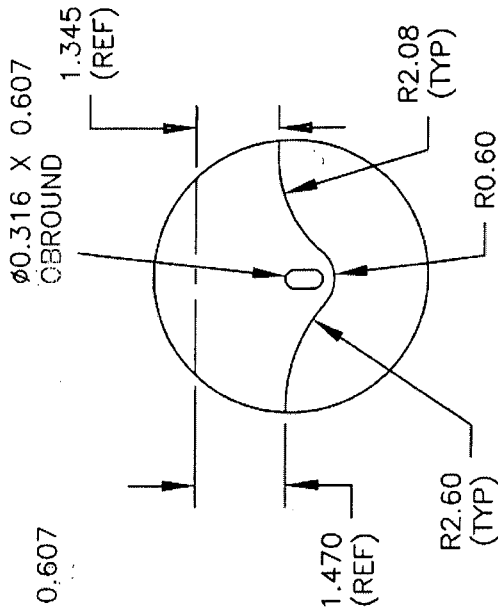
D3319-7 WEARPLATE

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 18 GAUGE (0.048 THICK)
- 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) PART IS SYMMETRICAL ABOUT CENTERLINE
- 5) ALL DIMENSIONS IN INCHES
- 6) WELD PER DART QSI 004
- 7) IDENTIFY ON INSIDE SURFACE AS INDICATED USING FINE POINT PERMANENT INK MARKER:
"TCCA-PDA, DART AEROSPACE LTD., P/N D3319-7 B/N BXXXXX,
FOR PRODUCT ELIGIBILITY SEE PDA05-18"

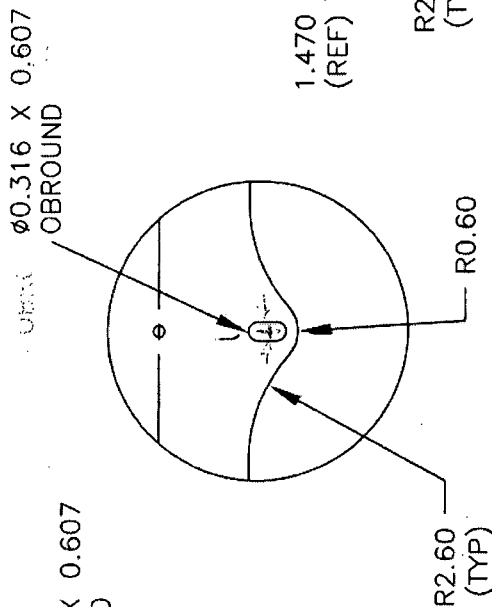


DESIGN PH	DRAWN BY PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. D3319	REV. B SHEET 5 OF 5
DATE 05.06.06	TITLE WEARPLATE		SCALE 1:3

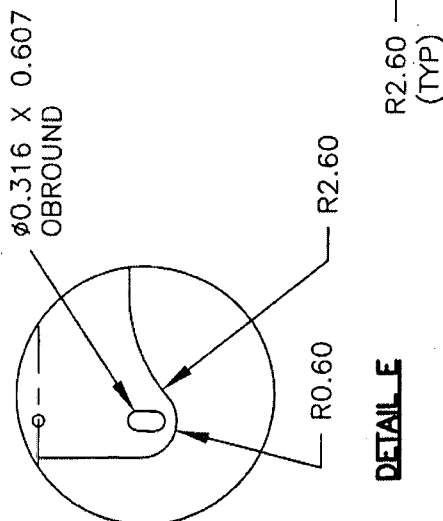
RELEASED
05.09.30



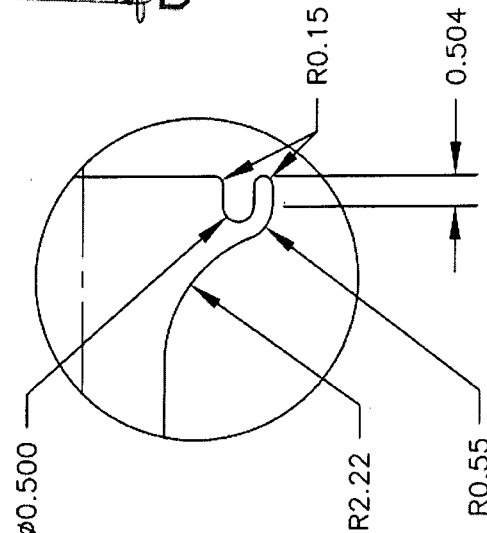
DETAIL J



DETAIL F

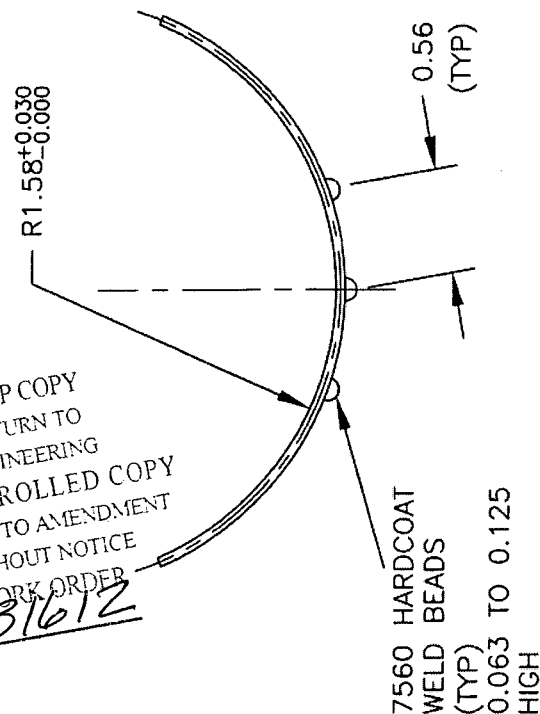


DETAIL E



DETAIL G

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WORK ORDER
NO. 31612



SECTION H-H
(SCALE 1:1)

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DART AEROSPACE LTD		Work Order:	31612
Description: Bearpaw wear plate		Part Number:	D33193
Inspection Dwg: D3319 Rev: 13		Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Inspection Sheet	Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
A	75.52	± 0.030	75.50	✓		M-T	
B	74.420	± 0.010	74.700	✓		M-T	
C	62.770	± 0.010	62.770	✓		M-T	
D	52.890	± 0.010	52.890	✓		M-T	
E	30.790	± 0.010	30.790	✓		M-T	
F	8.690	± 0.010	8.696	✓		Vern	
G	0.60	± 0.030	0.607	✓		Vern	
H	2.690	± 0.010	2.700	✓		Vern	
I	2.940	± 0.010	2.948	✓		Vern	
J	3.527	± 0.010	3.522	✓		Vern	
K	4.518	± 0.010	4.513	✓		Vern	
L	Ø 0.190	+0.005/-0.001	Ø 0.190	✓		Vern	
M	2.940	± 0.010	2.949	✓		Vern	
N	2.940	± 0.010	2.948	✓		Vern	
O	2.690	± 0.010	2.698	✓		Vern	
P	5.063	± 0.010	5.066	✓		Vern	
Q	6.163	± 0.010	6.168	✓		Vern	
R	0.316 x 0.607	± 0.010	0.316 x 0.605	✓		Vern	
S	0.048	± 0.010	0.046	✓		Vern	
T							
U							
V							
W							
X							
Y							

Measured by: JAH	Audited by: [Signature]	Prototype Approval: N/A
Date: 07/05/15	Date: 07-05-15	Date: N/A 07-05-15

Rev	Date	Change	Revised by	Approved
A	04.01.09	New Issue	KJ/RF	